SEQUENCE LISTING

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MACK, CHRISTINE MARIE
LIN, QING

<120> AMYLIN FAMILY PEPTIDES AND METHODS FOR MAKING AND USING THEM

<130> 0105US-UTL2

<140> 10/589,054
<141> 2006-08-10

<150> PCT/US05/004631
<151> 2005-02-11

<150> 60/550,447
<151> 2004-03-03

<150> 60/543,275
<151> 2004-02-11

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<170> PatentIn Ver. 3.3

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Gly Ser Asn Thr Tyr
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<223> Ala, Cys, Asp, Phe, Lys, Thr, or not present

<220>
<221> MOD_RES
<222> (2)
<223> Ala, Cys, Asp, Ser, or not present

<220>
<221> MOD_RES
<222> (3)
<223> Ala, Asp, Asn, or not present

<220>
<221> MOD_RES
<222> (4)
<223> Ala, Leu Thr, or not present

<220>
<221> MOD_RES
<222> (5)
<223> Ala or Ser

<220>
<221> MOD_RES
<222> (6)
<223> Ala, Ser, Thr, or Val

<220>
<221> MOD_RES
<222> (7)
<223> Ala, Cys, or Lys

<220>
<221> MOD_RES
<222> (8)
<223> Ala, Leu, Met, or Val

<220>

<221> MOD_RES
<222> (9)
<223> Leu or Thr

<220>
<221> MOD_RES
<222> (10)
<223> Gly, His, or Gln

<220>
<221> MOD_RES
<222> (11)
<223> Lys, Gln, or Arg

<220>
<221> MOD_RES
<222> (12)
<223> Leu, Trp, or Tyr

<220>
<221> MOD_RES
<222> (13)
<223> Ala, Asn, Gln, Ser, or Thr

<220>
<221> MOD_RES
<222> (14)
<223> Ala, Asp, Glu, Gly, Lys, Asn, Gln, or Arg

<220>
<221> MOD_RES
<222> (15)
<223> Ala, Asp, Glu, Phe, Leu, Ser, or Tyr

<220>
<221> MOD_RES
<222> (16)
<223> Phe or Leu

<220>
<221> MOD_RES
<222> (17)
<223> His, Gln, Ser, or Val

<220>
<221> MOD_RES
<222> (18)
<223> Lys or Arg

<220>
<221> MOD_RES
<222> (19)
<223> Phe, Leu, Ser, or not present

<220>
<221> MOD_RES
<222> (20)
<223> His, Lys, Gln, or not present

<220>
<221> MOD_RES
<222> (21)
<223> Gln, Thr, or not present

<220>
<221> MOD_RES
<222> (22)
<223> Phe, Leu, or Tyr

<220>
<221> MOD_RES
<222> (24)
<223> Pro or Arg

<220>
<221> MOD_RES
<222> (27)
<223> Thr or Val

<220>
<221> MOD_RES
<222> (30)
<223> Glu, Lys, or Asn

<220>
<221> MOD_RES
<222> (31)
<223> Ala or Thr

<220>
<221> MOD_RES
<222> (32)
<223> Phe, Tyr, or not present

<400> 39
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Thr Asn Xaa Gly Ser Xaa Xaa Xaa
20 25 30

<210> 40
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 40
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Lys Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 41
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 41
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Leu Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 42
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 42
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Pro Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 43
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 43
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 44
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 44
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Leu Pro Pro Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 45
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 45
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asn Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 46
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 46
Ala Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 47
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 47
Lys Cys Asn Ala Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 48
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 48
Lys Cys Asn Thr Ala Ala Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 49
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 49
Cys Ala Asn Leu Ser Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 50
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)..(1)
<223> Isocaproyl-Ser

<400> 50
Ser Thr Ala Val Leu Gly Arg Leu Ser Gln Glu Leu His Arg Leu Gln
1 5 10 15

Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25

<210> 51
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 51
Cys Ser Asn Ala Ser Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 52
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 52
Cys Ser Asn Leu Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 53
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 53
Cys Ser Asn Leu Ser Ala Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 54
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 54
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 55
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 55
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Gly Thr Pro
20 25 30

<210> 56
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 56
Cys Ser Ala Leu Ser Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 57
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Ac-Agy

<220>
<221> MOD_RES
<222> (7)
<223> Agy

<400> 57
Xaa Ser Asn Leu Ser Thr Xaa Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 58
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Ac-Lys

<220>
<221> MOD_RES
<222> (2)
<223> Agy

<220>
<221> MOD_RES
<222> (7)
<223> Agy

<400> 58
Lys Xaa Asn Thr Ala Thr Xaa Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 59
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Isocaproyl-Ser

<220>
<221> MOD_RES
<222> (6)
<223> Aib

<400> 59
Ser Thr Ala Val Leu Xaa Arg Leu Ser Gln Glu Leu Arg Leu Gln Thr
1 5 10 15

Tyr Pro Arg Thr Asn Thr Gly Ser Gly Thr Pro
20 25

<210> 60
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Isocaproyl-Ser

<220>
<221> MOD_RES
<222> (7)
<223> Lys(For)

<220>
<221> MOD_RES
<222> (14)
<223> Lys(For)

<400> 60
Ser Thr Ala Val Leu Gly Lys Leu Ser Gln Glu Leu His Lys Leu Gln
1 5 10 15

Thr Tyr Pro Arg Thr Asn Thr Gly Ser Gly Thr Pro
20 25

<210> 61
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Isocaproyl-Ser

<220>
<221> MOD_RES
<222> (6)
<223> Aib

<220>
<221> MOD_RES
<222> (7)
<223> Lys(For)

<220>
<221> MOD_RES
<222> (13)
<223> Aib

<220>

<221> MOD_RES
<222> (14)
<223> Lys(For)

<400> 61
Ser Thr Ala Val Leu Xaa Lys Leu Ser Gln Glu Leu Xaa Lys Leu Gln
1 5 10 15

Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25

<210> 62
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Isocaproyl-Ser

<220>
<221> MOD_RES
<222> (6)
<223> Aib

<220>
<221> MOD_RES
<222> (7)
<223> Lys(For)

<220>
<221> MOD_RES
<222> (13)
<223> Aib

<220>
<221> MOD_RES
<222> (14)
<223> Lys(For)

<400> 62
Ser Thr Ala Val Leu Xaa Lys Leu Ser Gln Glu Leu Xaa Lys Leu Gln
1 5 10 15

Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25

<210> 63
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

amino acid sequence

<400> 63
Lys Cys Asn Thr Ala Thr Cys Leu Leu Gln Gln Leu Gln Lys Leu Leu
1 5 10 15

Gln Lys Leu Lys Gln Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 64
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 64
Lys Cys Asn Thr Ala Ser Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 65
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 65
Lys Cys Asn Thr Ala Val Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 66
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 66
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25

<210> 67
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> Lys(For)

<220>
<221> MOD_RES
<222> (18)
<223> Lys(For)

<400> 67
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Lys Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 68
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (6)
<223> D-Thr

<400> 68
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 69
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>

<221> MOD_RES
<222> (6)
<223> dAh

<400> 69
Lys Cys Asn Thr Ala Xaa Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 70
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Ac-Ala

<220>
<221> MOD_RES
<222> (18)
<223> Lys(PEG5000)

<400> 70
Ala Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 71
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 71
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser
20 25 30

Asn Thr Tyr
35

<210> 72
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 72
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Leu Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly
20 25 30

Ser Asn Thr Tyr
35

<210> 73
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 73
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Lys Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 74
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 74
Lys Cys Asn Thr Ser Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 75
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 75
Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 76
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 76
Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 77
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 77
Lys Cys Asn Thr Ser Thr Cys Ala Thr Gln Arg Leu Ala Asn Glu Leu
1 5 10 15

Val Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 78
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (6)
<223> Hse

<400> 78
Lys Cys Asn Thr Ala Xaa Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 79
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (6)
<223> Ahb

<400> 79
Lys Cys Asn Thr Ala Xaa Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 80
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (6)
<223> Ahp

<400> 80
Lys Cys Asn Thr Ala Xaa Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 81
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (6)
<223> Thr(OPO3H2)

<400> 81
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 82
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> Orn

<220>
<221> MOD_RES
<222> (18)
<223> Orn

<400> 82
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Xaa Leu Ser Gln Glu Leu
1 5 10 15

His Xaa Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 83
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> Cit

<220>
<221> MOD_RES
<222> (18)
<223> Cit

<400> 83

Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Xaa Leu Ser Gln Glu Leu
1 5 10 15

His Xaa Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 84
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> homoK

<220>
<221> MOD_RES
<222> (18)
<223> homoK

<400> 84
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Lys Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 85
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> L-Octylglycine

<400> 85
Xaa Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu
1 5 10 15

Leu His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr
20 25 30

Tyr

<210> 86
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> N-3,6-dioxaoctanoyl-Cys

<400> 86
Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu His
1 5 10 15

Arg Leu Gln Thr Val Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 87
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 87
Lys Cys Asn Thr Ala Thr Cys Met Leu Gly Arg Tyr Thr Gln Asp Phe
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 88
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 88
Asp Ser Asn Leu Ser Thr Lys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 89
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 89
Lys Asp Asn Thr Ala Thr Lys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 90
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 90
Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu His
1 5 10 15

Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 91
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (33)
<223> 9Anc

<400> 91
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

Xaa

<210> 92
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (33)
<223> L-octylglycine

<400> 92
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

Xaa

<210> 93
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> N-isocaproyl-Lys

<400> 93
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 94
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> homoR

<220>
<221> MOD_RES
<222> (18)

<223> homoR

<400> 94
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1   5   10   15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
            20   25   30

<210> 95
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 95
Phe Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1   5   10   15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
            20   25   30

<210> 96
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (18)
<223> Cit

<400> 96
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1   5   10   15

His Xaa Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
            20   25   30

<210> 97
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES

<222> (18)
<223> Orn

<400> 97
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Xaa Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 98
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 98
Ile Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 99
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> 1-Octylglycine

<400> 99
Xaa Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 100
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>

<221> MOD_RES
<222> (1)
<223> Isocaproyl-Cys

<400> 100
Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu His
1 5 10 15

Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 101
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (11)
<223> Cit

<400> 101
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Xaa Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 102
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<220>
<221> MOD_RES
<222> (33)
<223> 4ABU

<400> 102
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

Xaa

<210> 103
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<220>
<221> MOD_RES
<222> (1)
<223> Isocaproyl-Lys

<220>
<221> MOD_RES
<222> (33)
<223> 4ABU

<400> 103
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

Xaa

<210> 104
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 104
Lys Cys Asn Thr Ser Thr Cys Ala Thr Gln Arg Leu Ala Asn Glu Leu
1 5 10 15

Val Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Glu Ala Phe
20 25 30

<210> 105
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 105
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Thr Asn Val Gly Ser Glu Ala Phe
20 25 30

<210> 106
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 106
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Arg Ser Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 107
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 107
Lys Cys Asn Thr Ala Thr Cys Val Thr His Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 108
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 108
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 109
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 109
Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu His
1 5 10 15

Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr
20 25 30

<210> 110
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 110
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Asn Phe Val Pro Arg Thr Asn Thr Gly Ser Asn Thr
20 25 30

Tyr

<210> 111
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 111
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Glu Thr Phe
20 25 30

<210> 112
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
amino acid sequence

<400> 112
Ala Cys Asp Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 113
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 113
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Lys Ala Phe
20 25 30

<210> 114
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 114
Lys Cys Asp Thr Ala Thr Cys Val Thr His Arg Leu Ala Gly Leu Leu
1 5 10 15

Ser Arg Ser Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 115
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 115
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Ala Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 116
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 116
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Ala Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 117
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 117
Ser Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 118
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 118
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Met Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 119
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 119
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Val Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 120
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 120
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Asn Glu Tyr Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 121
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 121
Ser Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 122
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 122
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Thr Glu Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 123
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 123
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Glu Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 124
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 124
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Thr Asp Tyr Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 125
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 125
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Gln Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 126
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 126
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu
1 5 10 15

His Arg Phe Gln Thr Phe Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 127
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 127
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu
1 5 10 15

His Arg Phe His Thr Phe Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 128
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 128
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu
1 5 10 15

His Arg Phe Gln Thr Phe Pro Arg Thr Asn Thr Gly Ser Gly Thr Pro
20 25 30

<210> 129
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 129
Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Asp Phe Leu His
1 5 10 15

Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 130
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 130
Lys Cys Asp Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 131
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 131
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Phe Asp Phe Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 132
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 132
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ala Ala Ala Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 133
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 133
Thr Cys Asp Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 134
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 134
Cys Ser Asn Leu Ser Thr Cys Ala Thr Gln Arg Leu Ala Asn Glu Leu
1 5 10 15

Val Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 135
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 135
Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Glu Leu
1 5 10 15

Val Arg Leu Gln Thr Tyr Pro Arg Thr Asn Val Gly Ser Asn Thr Tyr
20 25 30

<210> 136
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 136
Cys Ser Asn Leu Ser Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 137
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic amino acid sequence

<400> 137
Lys Cys Asn Thr Ala Thr Cys Val Leu Gly Arg Leu Ser Gln Glu Leu
1 5 10 15

His Arg Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Asn Thr Tyr
20 25 30

<210> 138
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MOD_RES
<222> (1)
<223> Any amino acid; see specification as filed for detailed description of substitutions and preferred embodiments

<220>
<221> MOD_RES
<222> (2)
<223> Any amino acid or not present

<220>
<221> MOD_RES
<222> (3)
<223> Ala, Gly, Ser, Asp, or not present

<220>
<221> MOD_RES
<222> (4)
<223> Asn, Ala, Asp, Gly, or not present

<220>
<221> MOD_RES
<222> (5)
<223> Ala, Leu, Thr, or Ser

<220>
<221> MOD_RES
<222> (6)
<223> Ala, Ser, or Thr

<220>
<221> MOD_RES
<222> (7)

<223> Ala, Ser, Val, Hse, Ahb, Ahp, D-thr, Thr, or a
derivative thereof

<220>
<221> MOD_RES
<222> (8)
<223> Any amino acid; see specification as filed
for detailed description of substitutions and
preferred embodiments

<400> 138
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5